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CORPORATE STRATEGY DEVELOPMENT: INTERNATIONAL DISTANCE MODEL FOR  
THE BRAZILIAN MARKET

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## Abstract

This paper aims to understand and examine the critical factors, which might help the companies willing to export to Brazil to enter that market. Those factors can be also defined as distances between Brazil and the other countries (companies) and have been analysed in the International Distance Model. In order to understand the findings of that model, it has been applied to one real world example of the Polish company exporting its product to Brazil.

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**Keywords:** export, import, internationalization strategy, Brazil, corporate strategy

## 1. INTRODUCTION

The aim of this study is to recognize critical factors in the area of international corporate strategy that accurately explain the intensity of trade between Brazil and other countries. The critical factors are derived from the International Distance Model and focus on the recognition of cultural, administrative, geographic and economic distances between Brazil and its trade partners. The intensity of trade has been analysed using the value of Brazilian imports from other countries, whereas the value of each distance has been supported using Pankaj Ghemawat CAGE distance model and other available models and measurements that enable to compare various countries. That is to say, the main objective of this study is to identify the factors that enhance the trade intensity between Brazil and the other countries. Those factors, depending on the specificity of each country, can be seen as both: opportunities and barriers in the internationalization strategy development.

The study consists of two parts. First and the central one, focuses on the quantitative measurements of the Brazilian trade flows (expressed as export values), with various quantifiers of the International Distance Model. The aim of this part is to identify the factors influencing the trade intensity of Brazil. Second one includes the qualitative (descriptive) real-world case study of a Polish company that has been exporting to Brazil. The aim of this part in turn, is to present the opportunities vs. barriers that the foreign companies may face while entering Brazilian market. Such structuring helps to evidence the theory, and link it to practice.

The results of this research enable to identify the critical factors that should be carefully incorporated to the international corporate strategy for the companies willing to export to Brazil. Such results can equally contribute to further research by defining a starting point (basis) for next-layer analysis of this topic. Although the research results do not show directly which of the “distances” are the most important, and consequently, around which factors the foreign companies should build their strategies for Brazil, several conclusions can be withdrawn. The key ones are: that International Distance Model needs significant amount of data (volume) to efficiently explain reality with statistical significance, and that some country pairs (or industries, or individual companies) may require more granular (and personalized) approach for such type of assessment.

## 2. LITERATURE REVIEW

### 2.1 International Business and globalization

Once a company decides to sell its products abroad, it should shape the international strategy taking into the consideration both: opportunities and barriers related with that move. Although it seems to be a simple rule, a lot of companies struggle with that. Many authors tried to explain the factors behind different international strategies, however most of them conclude, that it is hardly impossible to create a universal model that could fit every company and internationalization strategy. In majority of the cases, companies that decide to engage in the international expansion, try to follow a certain logic (e.g. exporting only to the neighbourhood countries). In doing so, they seek to find a common ground for their internationalization strategy, which enables them to minimize the failure of international strategy.

While defining the logic behind the international strategies, many of them have been justified by the implications of *globalization*. That is why working on the international strategies ought to imply on the first place definition of what *globalization* means exactly in their particular case. That is to say, if the *globalization* is an opportunity they should fully explore, or rather a barrier that should be carefully analysed and eliminated. This identification can be difficult, since *globalization* itself might be interpreted in the various ways. One of the most general definition of *globalization* states that it is a process of “developing [...] standardized products, at the right price, on a global scale” (LEVITT; 1984). Although Theodore Levitt, one of the most renewed authors of Harvard Business Review, wrote this definition almost thirty years ago in his article “*The globalization of markets*”, it is still often quoted and became the base for further research. However, several authors indicate that the principles of the article have changed over time, and in order to analyse its implications in the academic papers, it should be narrow to each specific case (TAKEUCHI; 2004).

Pankaj Ghemawat (2003) argues that in order to describe current interrelation between different countries with regard to the international strategy, the *globalization* should be rather replaced by *semi-globalization*, thus “a state of incomplete cross-border integration”. *Semi-globalization* can be also defined as a more complex than extremes of total isolation and total globalization. This definition refers to the situations when two cooperating countries (companies) do not face the high obstacles in the trade relations, but on the same time, the

need to spend several resources in order to adapt their operations in the different country (PENG; 2009; 20). Ghemawat (2007) grounded his study of *semi-globalization* using the concept of “distances” that could be distinguished between various countries. Those distances help to identify the foreign countries that are similar in terms of cultural and administrative characteristics or geographic and economic proximity. The foreign countries which according to that concept are similar to the countries of internationalization origin, most likely are also the easiest internationalization destinations for the companies from origin countries.

Although Ghemawat was the first author who has used *semi-globalization* term in the international business concept, he is not the only who questioned the global strategy as a uniformed approach. For instance, Rugman and Hodgetts (2001) named global strategy a “myth”, stating that nowadays, the majority of MNEs must respond to the local consumer’s needs and consequently business strategies are not global. Several authors instead of referring to Ghemawat’s *semi-globalization*, conclude that it is *regionalization* rather than *globalization* that explains recent behaviours of MNEs in the area of international strategy (ARDALAN, 2010; KHAN, 2010). However, in that sense, *regionalization* and *semi-globalization* have exactly the same implications and both terms demonstrate the supremacy over globalization (MEHANNA; 2008).

The implications Ghemawat’s work can be visualized using the example of multinational enterprises (MNEs) performance. Rugman and Verbeke (2004) argue, that the success of many MNEs should be interpreted as the regional, rather than the global one. In their study, they bring the issue of integration organizations, which operate in the regional level and aim to reduce the barriers between the countries. By providing the examples of NAFTA or the European Union, they associate the presence of MNEs with the reduction of these barriers within the regional blocks. This argument seems to be aligned to the study of Foxley (2010), who argues that the regional integration, especially in the regions where it has not been so strong in the last few decades (namely Eastern Europe, Latin America, and East Asia), may become a milestone in fostering the international business activities. However, it occurs in the intra-regional perspective and cannot be attributed to the *globalization*.

In the last decade, much attention has been paid to born-global firms. Knight and Cavusgil (2004) define them, as “early adopters of internationalization”, thus a companies that enter the foreign markets from the beginning of their existence or in the short period after they have been founded. Strategy of internationalization at the early stage of companies’

existence is one of the most important factors that helped them to achieve a superior performance (ZHOU; WU; XUEMING, 2007). Following those definitions, born-global firms support the *globalization* approach or the reasoning of Theodore Levitt that has been recalled at the beginning of this work. However, several authors question whether born-globals are in fact really global. Johanson and Vahlne (2009) argue, that taking into account the geographical scope of the majority of born-global's activities they should be rather called "born-regionals".

Taking into the consideration above argumentation, the concept of *semi-globalization*, seems to be the most accurate and updated one to describe the current interrelation between various countries. Consequently, in the following parts of the work, the International Distance Model as well as its final conclusions will be grounded on that dimension.

## **2.2 International Business and measuring the distance**

The question of how to measure the distances between different countries has been raised by several authors during the last few decades. Since Gert Hofstede published *Culture's Consequences* in 1980, academic researchers used his culture values framework intensively in order to explain the implications of similarity and differences between various countries. Hofstede framework takes into consideration five dimensions: power distance, individualism, uncertainty avoidance, masculinity and long-term orientation, and enables to compare the countries, based on his cultural measurements. Although Hofstede's work has been facing wave of criticisms due to its limitations (JAVIDAN et al.; 2004), it is still the most influential publication dealing with the topic of culture differences, and became the base of thousands empirical publications (KIRKMAN; LOWE; GIBSON, 2002).

Nevertheless, the culture cannot be the only variable that justifies the trade flows and destinations of companies' internationalization strategies. Peng and Pleggenkuhle-Miles (2009) refer to four parts of the global strategy, which ought to be considered by each company that wants to become global, and therefore, is willing to cross the border and invest or set-up operations in a foreign country. According to the mentioned authors, in order to understand global strategy, the study of the following dimensions is essential: cultural vs. institutional distance, global vs. regional geographic diversification, convergence vs. divergence in corporate governance and domestic vs. overseas corporate social responsibility. The CAGE model address majority of that dimensions. The first one, cultural vs. institutional

distance, is directly related with the first two components of the CAGE framework – cultural and administrative distance. Second, global vs. regional, can be attributed to the analyse of the geographic part of the framework. The remaining two, convergence vs. divergence and domestic vs. overseas corporate social responsibility, although are not directly included in the CAGE framework, might be performed as an additional analysis, that fulfil the International Distance Model. The proper analyses of these variables help to define the countries, in which the global strategies of the multinational companies have higher chances to be successful. Moreover, the critical part of the global strategies is related to the recognition of the compromise between the localization strategy and total globalization. The first one implies creation of different strategy for every single country, whereas total globalization, implementation of equal (or very similar) strategy across different countries (PENG; 2009, p. 20).

The compromise between localization and globalization may be also defined (as already mentioned in that work) *semi-globalization* (GHEMAWAT; 2007). This is therefore the stage of the global strategy where the barriers (costs) to cross the borders are still high, but on the other hand not high enough to disrupt the international business and its strategy (GHEMAWAT; 2002). Before choosing destination of international expansion, each company should try to measure the possible effects of *semi-globalization* (both positives and negatives) in order to minimize the potential risk that may arise from the specific environment of other countries. Pankaj Ghemawat (2007) argues, that this can be done through discovering the critical differences (and their origins), according to the four dimensions (referred by Ghemawat also as “distances”): cultural, administrative, geographic and economic (CAGE). Through the analysis of the proximity in the CAGE framework, each company is able to adjust its international strategy and has more chances to reduce the negative effects of the “distances”. In the following sections of this paper, the CAGE variables (as well as their complementary measurements) will be analysed and discussed as International Distance Model for the Brazilian market.

Although the components of the CAGE framework in some cases are interrelating, Ghemawat (2007) stresses that only definition of each “distance” gives the full picture of similarities vs. differences between the countries. Exhibit 1 (in appendices) summarizes the CAGE framework components at the country level analysis.

When discussing the culture and its implications for international strategy, it is important not to consider it as only a set of values, beliefs, norms and behavioural patterns (LEUNG et. al. 2005). Ghemawat (2007) recognizes few measurements of cultural distance, such as different languages, religion or trust. Apart from the choice of the variables, another important reason for analysing cultural impact on international strategy is the fact that it changes rather slowly. This feature helps to create a few country clusters that can be considered as those characterised by the same cultural values, beliefs and patterns (HOEFSTEDE; HOPPE, 2004). This notion has an important implication for companies trying to design their international strategy, especially when they need to cooperate closely with their overseas partners. Forcing the change of partner's values, beliefs and norms is probably not the best strategy, since with relation to the culture, mutual understanding and stability has been proved to lead to better results (LEANA, BARRY, 2000). That is to say, each international strategy should take into account the cultural environment of the foreign country in order to fully exploit market potential and build a strong brand image in the positive perception of the local society (ROTH, 1995).

Administrative part of Ghemawat's distance model can be attributed to the institutional framework of each country, therefore formal and informal institutions governing individuals' and firms' behaviour (PENG, 2009; 93). Some authors argue that institutional (administrative) view is a complementary distance for culture (XU; SHENKAR, 2002), nevertheless, following the CAGE framework, the culture and administrative distances will be further studied as a separate variable. According to Ghemawat's framework, administrative part should consider the lack or existence of colonial ties between the trading partners. This variable seems to be important in the case of Brazil and other Latin American countries. Portuguese foreign direct investments and trade opportunities related with joint ventures and strategic alliances in Brazil, represents around 40% of international investments of the Portuguese companies worldwide. Moreover, South America is the top destination for Spanish and Dutch investments, which also have strong colonial ties in that region (COSTA, 2006). Another part of administrative distance is a shared trading bloc. Although several authors question the relevance of the trading blocs as an efficient way to reduce the trade barriers and enhance the flows between the member-state countries, they simultaneously underline that the political and economic approximation of the (block) member state countries as a factor that fosters the trade relations (BALDWIN; SEGHEZZA, 2010).



This approximation may help to reduce the political and most importantly, ideological differences among participating countries of the regional block (FOXLEY, 2010). Apart from the colonial links and sharing the same trade block, the administrative part of the CAGE model includes the existence (or lack) of common currency, as well as the indicators of corruption and political stability level, and the origin of the legal system.

The geographic distance in the CAGE framework seems to be the most tangible variable, since it can be measured e.g. with the physical distance between the main cities in the countries. However, it seems that it is not the most important factor exemplifying the trade-flows between the various countries. Nowadays the coefficient of transport costs or product differentiation across different economies, are stronger than the simple consideration of the physical geographic distance (CLARK, 2007). However, Ghemawat (2007) while introducing the geographic distance extends this concept to other attributes, such as the presence of land border, differences in time zones and climates, access to the ocean, topography and within-country distances to the borders. In that perspective, geographical distance is still valid, even considering the general trend of decreasing transport costs. The study of Carrere and Schiff (2004) defends, that geographic distance has become more important over the time for a majority of countries. However, by geographic distance they consider the costs related with the international trade, such customs costs, domestic transport costs, air / land / ocean transportation costs, costs of competition, exchange rate policy, regional integration, uneven growth or counter-season trade. Consequently, the geographic distance cannot be omitted while shaping an international strategy, which is consistent with the Ghemawat's CAGE methodology.

Finally, the last component of the CAGE framework consists of the economic distance evaluation. This includes the study of factors such as differences in GDP *per capita* or income *per capita* among the studied countries. The differences between the countries' development have several implications on its international presence. In the exporting strategy, the companies from the emerging economies are more likely to achieve success on the advanced economies markets if they use a cost-based strategy. Simultaneously, the companies from advanced (developed) economies should consider the differentiation strategy as the one, which can contribute the most to their international performance (AULAKH et. al., 2000). However, this way of thinking may not be true in the case of emerging economies, which have the high purchasing power parity, and can be classified as advanced developing

countries. This means, that even though the three components of the CAGE model – cultural, administration and geographical, show a high degree of similarity, the lack of economic convergence may suppress the trade flows.

To illustrate the concept of the CAGE framework and its implications for the company's strategy willing to cooperate with Brazilian partner or to enter this market, the cross-country analyses of CAGE between Brazil and two European countries (Portugal and Poland) will serve as an example. This analysis is presented in the exhibit 2 (in appendices). According to the CAGE framework<sup>1</sup>, Portugal is on the 10<sup>th</sup> place with regard to the distance calculated for Brazil (see exhibit 3 in appendices). In the same classification, Poland is on the 96<sup>th</sup> position, which means, that following the CAGE measurements, Portugal and Brazil are much closer to each other than Brazil and Poland. General analysis of the cross-country analysis between Poland and Portugal, performed for the purpose of this work, seems to explain that result.

Although Polish Diaspora in Brazil is the second largest in the world<sup>2</sup> (only after the community in the United States), the fact that Portugal and Brazil have the same (Portuguese) official language, makes the link between those two countries much stronger. Moreover, Portuguese diaspora in Brazil and Brazilian diaspora in Portugal are also large and definitely closely bring those two countries. Additionally, Portugal is the highest classified non-Latin American country in the CAGE classification for Brazil (see the top 20 CAGE classification for Brazil in the exhibit 3 in appendices section). It is worth mentioning, that apart from Portugal, there are only 5 non Latin American countries in Brazilian Top 20 (three small islands: Trinidad and Tobago, Barbados, Grenada; Angola – also former Portuguese colony; and Liberia). Therefore, even general analysis of this classification proves that the cultural distance of the CAGE framework has a very important impact on the proximity between the countries.

The historical connection is also noticeable in the administrative part of the CAGE model. The colony / colonizer link is also in favour of Portugal – Brazil approximation (rather than Poland – Brazil) and is reflected, among others, in the same (French) legal origin. Neither Portugal nor Poland is in the same trading block with Brazil.

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<sup>1</sup> All of the CAGE framework classifications have been withdrawn from the CAGE Comparator section, at Pankaj Ghemawat website.

<sup>2</sup> <http://www.polonicus.com.br>

With regard to the geography distance, although both countries (Poland and Portugal) are situated in Europe, this dimension also seems to be in favour of Portugal. Physical distance, which is greater in case of Poland, is reflected, among others, in the transportation routes. Portugal, being one of the most important marine hubs in Europe, has a direct connection with Brazilian ports. Polish ports are much smaller than the Portuguese ones, and are rather regional hubs and are not used in direct, transatlantic transportation. The network of flight connections is also in favour of Portugal, since it has many direct flights to Brazil on the daily basis from its main airports in Lisbon and Porto. Poland does not have any direct flight to Brazil, and consequently, the journey has to be done at least with one stop, which increases the time of the trip.

The last part of the CAGE framework, the economic distance, seems to be in favour of Poland. Both Brazil and Poland are classified as emerging economies, which from the theoretical point of view, increases the chances of entering the market within the same e.g. differentiation strategy. In some cases, the trade between emerging economy and advanced economy (Portugal belongs to the latter group), is more complex due to e.g. regulatory constraints. Consequently, the companies from emerging economies (therefore from Brazil and Poland), may find it less difficult to overcome the obstacles related with the cross-border strategies, due to the similar level of institutional development (CAZURRA; GENC, 2007).

Besides, despite of the current crisis that has a negative impact on majority of the European Union economies, Poland is still in the group of countries with positive GDP growth. Additionally, Portugal is the country that next to Greece, Spain, Ireland and Italy, suffers the most among the European Union economies from latest financial crisis. Taking all mentioned factors into the consideration, it can be stated that in the cross-country analysis between Portugal and Poland (from the Brazilian perspective), the economic distance does not explain the proximity between Portugal and Brazil. However, the strength and intensity of the remaining CAGE distances, that is to say cultural, administrative and geographical, may surplus the economic one. This positions Portugal higher (closer) than Poland in the CAGE distance framework for Brazil.

Apart from the CAGE distances, several different explanations of proximity between the countries may be found. According to Johanson and Vahlne (2007), so called *business networks* may provide insights to the study of trade intensity between two countries. Business networks can be defined as strong and permanent relationships e.g. with important suppliers

and customers or two companies, which closely cooperate with each other (COWLEY, 1988). Once a company A from country  $\alpha$ , invest or export to country  $\beta$ , the other companies from country  $\alpha$  could treat it as a recommendation and an incentive to follow such a strategy. Moreover, the company A can also try to encourage other companies from country  $\alpha$  to invest in country  $\beta$ , so they create a strong group of foreign companies from country  $\alpha$  to country  $\beta$ . Similar reasoning has been described in the Uppsala internationalization process (JOHANSON; VAHLNE, 2007), which has gained a great recognition in the area of international business strategy. According to this model, the differences in the business environments between various countries can be defined as *psychic distance*, therefore numerous business factors that are different in various countries. The *psychic distance* is closely related with *liability of foreignness* (LoF), the other term commonly used in the area of international business strategy. LoF can be attributed to every single cost that a firm faces in the social and economic environment when it operates in foreign markets (GUAR; KUMAR; SARATHY, 2011). As a result, the higher *psychic distance* is, the greater LoF becomes. However, *psychic distance* and LoF are less tangible variables, therefore their precise measuring cannot be applied in the International Distance Model.

### 3. HYPOTHESES

Since the main purpose of this research is to examine the impact of the International Distance Model components on the Brazilian trade inflows (expressed in the value of imports), the study will assess the relation between the imports from countries of origin and the CAGE distance of Brazil to that countries measured all together (table 3), as well as the separate impact of each CAGE's component. Consequently, the research consists of the four main hypotheses, related to each of the CAGE framework distances, thus cultural, administrative, geographical and economic. Although the impact of the general CAGE distance is not linked directly with any hypothesis, it will serve as the auxiliary tool, which supports the final conclusion and the implications of the study for international corporate strategy of entering Brazilian market.

Entering the foreign market, regardless the entry mode or the company's experience in the internationalization process, is always associated with transaction costs. Apart from the transaction costs related to the communication and internationalization control, they can be also attributed to the cultural factors (KOGUT; SINGH, 1988). Several authors argue, that the

national culture has a strong impact on the corporate culture of the corporations and therefore, affects its international operations and may explain the presence and absence in particular countries (ESSOUNGA et. al., 2009). Usually, the cultural distance moves away the countries and has a negative impact on its trade relations. That was a case in many western consumer products, which were not accepted in Saudi Arabia, mainly because of the cultural gap between the western word (the origin of the products) and the local consumers (PENG, 2009; 165). Moreover, it is often the case that the companies use import / export strategies in their early stage of international presence. In that situation, they choose the culturally similar countries and only after they gain more international experience, they might expand their presence to other, not-culturally related destinations (BARKEMA; DROGENDIJK, 2007). Thus, I suggest:

**Hypothesis 1:** The higher cultural proximity between Brazil and the trade partner country, the higher import inflows to Brazil from that country.

As already mentioned in the literature revision, some authors treat cultural and administrative distances as the one dimension. However, in our International Distance Model, following the CAGE framework, the common language is treated as a part of the administrative distance. According to Peng (2009; 165), “business between countries that share a language on average is three times greater than between countries without a common language”. The same author also stresses the importance of the common-law bases, expressed in the CAGE model as the origin of a legal system. Similarly as with language, also in the case of the countries having the same legal origin, trade inflows are expected to be higher. The same positive relation can be attributed to colony / colonizer links. South America, which consists of the post-colonial countries, has a strong links expressed by foreign direct investments with Portugal, Spain and the Netherlands, therefore the former colonizers (COSTA, 2006). Further positive relation in the choice of international expansions can be also noticed in case of the Commonwealth countries and Great Britain (PENG, 2009; 165). Thus, I propose:

**Hypothesis 2:** The higher administration proximity between Brazil and the trade partner country, the higher import inflows to Brazil from that country.

Johanson and Vahlne (2007) argue, that internationalization process is related with so called establishment chain. The companies operating abroad usually start their internationalization presence in the neighbourhood countries. While doing so, they use the low-commitment modes, such as export strategies, and only once they achieve foreign market knowledge, they switch to strategies with a stronger commitment (e.g. owned subsidiaries). Applying that concept for the purpose of this research, it can be stated that large geographical distance (expressed in the kilometres distance) between Brazil and its trade partners, deters the companies from the distant countries to involve in the trade relations with Brazil. However, in the globalized world, where transportation costs are no longer a high barrier, perhaps geography cannot be treated as the most important variable explaining international expansion. John Key (2001) claims that geography is still an important variable in the globalised world. Nevertheless, he associates it more with the human capital, rather than products and services flows. Yeung (2002) argues that “economic globalization is an inherently geographic phenomenon in relation to the transcendence and switchability of geographic scales and discursive practices as sociospatial constructions”. Both authors exceed geographic distance to more than just a physical distance that can be measured with kilometres, difference in the time or climates zones. In fact, they combine a geographic distance with other distances and differences among the societies, nations and companies. It is consistent with the claim, that the geography seen as the physic distance is no longer a great barrier, which solely determinates the trade between the countries. Thus, I propose:

**Hypothesis 3:** The geographical proximity between Brazil and the trade partner country is not positively correlated with the import inflows to Brazil from that country. Consequently, it might be the case the higher geographic distance between Brazil and the trade partner country, the higher import inflows to Brazil from that country may occur.

Final component of the CAGE model consist of the measurement of economic distance, such as GDP per capita, GDP Growth, Human Development Index or Internet penetration. Several authors argue that the companies achieve better results while crossing the border to the countries with the similar level of economic development (MYERS; DROGE; CHEUNG, 2007). Therefore, companies from the emerging economies achieve better results while involving in the trade relations with the other companies from developing countries (TSANG; YIP, 2007). Although, majority of literature focuses on the performance of

multinational enterprises and the foreign direct investments, some reference to the import / export strategies (and their positive relation between the economic development as the factor that fosters export flows) can be found (HULTMAN; ROBSON; KATSIKEAS, 2009). Thus, I propose:

**Hypothesis 4:** The higher economic proximity between Brazil and the trade partner country, the higher import inflows to Brazil from that country.

## 4. RESEARCH METHOD

The following research consists of two parts – quantitative and qualitative (descriptive) one. The quantitative part includes testing whether the origin of Brazilian imports can be explained by the CAGE distances and aims to test hypotheses presented in the previous part of the work. In order to do so, the imports from the years 2001 – 2011 have been withdrawn from the Ministry of Development, Industry and Foreign Trade of Brazil (*Ministério do Desenvolvimento, Indústria e Comércio Exterior*) official database, whereas the values of the CAGE distances framework for Brazil have been withdrawn from the Pankaj Ghemawat's official website database<sup>3</sup>. The qualitative (descriptive) part consists of the case study of a company based in Poland, which has an experience in exporting its products to Brazil. This part is to identify a real-world set of factors (opportunities and barriers) and oppose them to International Distance Model framework. Such comparison may then be used to evaluate whether this model can be a reliable tool for companies while designing their corporate strategies for international expansion.

### 4.1 Quantitative part

The CAGE framework for Brazil includes the classification of 149 countries, where the lower value of CAGE distance means the higher proximity of Brazil and the other country (as explained in the table 3). In order to match the CAGE results to the value of Brazilian imports, the analysis was limited to the corresponding 149 countries. The imports were separated into two time periods – the imports from 2011 (the most recent available data) and the sum of the imports from the 10-years period 2001 – 2010. Additionally, both groups of imports were divided by the analogous Gross Domestic Products (in US dollars) of each

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<sup>3</sup> <http://www.ghemawat.com>

country, which is consistent with the methodology of the World Bank analysis for the trade indicators. In both time periods, the value of imports has been adjusted by GDP from 2011.<sup>4</sup>

## 4.2 Qualitative (descriptive) part

The purpose of the qualitative (descriptive) part is to verify, whether the implications of the International Distance Model for Brazil, might be found in the real-world example. The aim of the case study is not only to illustrate the history of the company that exports to Brazil, but also to enrich the current findings presented in the qualitative part. In that sense, the case study is an attempt to transform the theoretical concepts of the International Distance Model to the practical ground.

In order to find the company, that could serve as a real-world reference to the International Distance Model for Brazil, the list of all Polish companies which export their products to Brazil has been withdrawn from the Polish Export Promotion Ministry of Economy Portal<sup>5</sup>. The list consisted of 42 Polish companies, which are currently exporting their products to Brazil. In the initial stage of establishing the contact with those companies, general email with the request for participation in the research has been sent. Due to the very low response rate, the profile of each company has been carefully studied and the companies which seemed to be the most interesting ones for the purpose of this research have been determined. This has been done taking into account the following dimensions: the company's profile (industry) and export expertise (number of countries to which it is exporting). Following that methodology, 10 companies have been identified and contacted personally by telephone. After explanation of the research purpose and methods, one company agreed to participate in this research. It is worth mentioning, that while asking for the participation in the research, the resistance from the majority of the companies was highly visible. The main arguments against the participation were related with the lack of time to share the information (data) related with exporting, as well as the reluctance to share the information and know-how, which might be used by other companies exporting to Latin America.

The company which agreed to participate in the study preferred to be anonymous (some of the data used to support this research is not public), therefore in the following parts of this research this company will be referred as the company  $\alpha$ . The data collection from  $\alpha$

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<sup>4</sup> Gross Domestic Products values have been withdrawn from the database of Central Intelligence Agency (CIA) Factbook.

<sup>5</sup> <http://www.eksporter.gov.pl/>



was done mainly through exchanging emails with the person responsible for export, which was preceded by one meeting in person.

## 5. RESEARCH RESULTS

### 5.1 CAGE Distances and Imports Volumes

In order to see which of the CAGE distances have an impact on the value of imports and imports/GDP in the two time periods (2011 and 2001 – 2010), five separate values of CAGE have been subtracted. The first includes the general CAGE distance, which measures the broad distance between Brazil and 149 countries. The following ones maximize the impact of, respectively, cultural (CAGE – C), administrative (CAGE – A), geographical (CAGE – G) and economic (CAGE – E) distances. The values of the sub-CAGE groups were attained by maximization of the CAGE distances on the Ghemawat's CAGE comparator platform. However, the analysis excluded the economic distance (CAGE – E), since maximization of this value was associated with the biased results, placing dozens of countries with the “zero” score distances. Nonetheless, the economic distance will be further analysed using the other variables. The coefficients of the Pearson Correlation test have been presented in the table 1.

**Table 1** – Pearson Correlation coefficients for imports / CAGE distances for Brazil

	<b>Imports 2011</b>	<b>Imports/GDP 2011</b>	<b>Total Imports 2001-2011</b>	<b>Total Imports 2001-2010/GDP 2011</b>
<b>CAGE</b>	0,0810	-0,2772	0,0319	-0,3492
<b>CAGE - C</b>	-0,0615	-0,0628	-0,0963	-0,1210
<b>CAGE - A</b>	0,0791	-0,2797	0,0294	-0,3538
<b>CAGE - G</b>	-0,0409	0,0365	0,0016	-0,0879

Source: own elaboration.

Four out of sixteen coefficients are significant. Moreover, they are consistent in the both time period groups, thus general CAGE for imports/GDP for 2011 and total imports for

2001 – 2010/GDP and show the same, negative correlation of the variables. Although the coefficients are weak, they can be used to support the hypotheses.<sup>6</sup>

Based on these tests, it can be concluded, that the proximity of the countries according to the CAGE distances values do not result in the higher trade inflows (expressed in the import volumes), since the general CAGE has the negative correlation of -0.28 in the first and -0.35 in the second time period. In fact, the negative correlation coefficients suggest, that the higher CAGE distance (therefore, the analysed countries are less similar in terms of cultural, administrative, geographical and economic distances), the trade inflows are higher. The same value of coefficients, therefore -0.28 in the first time period and -0.35 in the second one, was obtained for the CAGE – Administrative test, which suggests that Brazil imports more from the countries, which are less similar in terms of the administrative dimension. The CAGE – Cultural and CAGE – Geographic tests did not obtain significant results and consequently cannot support the related hypotheses.

### **5.1.1 Economic Distance and Imports Volumes**

Since the CAGE – Economic distance value, withdrawn from the Ghemawat's CAGE comparator platform was not used in the study, the other measurements of economic distances were analysed. Following the study of Berry, Guillen and Zhou (2010), the economic distance in the cross-national analysis can be performed by testing the difference in economic development and macroeconomic characteristics. In order to follow that methodology, four further dimensions have been evaluated: income (expressed by GDP per capita), inflation (GDP deflator), exports of goods and services (% of GDP) and imports of goods and services (% of GDP). The data was accessed at World Development Indicators (WDI) database, which is the part of the World Bank statistical platform. Consistently with the previous analysis, the number of countries has been limited and matched to those available at the CAGE comparator platform. Since in the WDI database for GDP per capita and GDP deflator the data for Taiwan was unavailable, this country was omitted in the economic distance and consequently, only 148 countries have been matched to the import values. Moreover, in the case of exports and imports of goods and service (% of GDP), the number of unavailable countries was larger (apart from Taiwan, also Guinea-Bissau, Guyana, Niger, San Marino and Suriname) and in those two indicators, only 142 countries were matched to the imports values. Several

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<sup>6</sup> For the purpose of this research, the level of significance has been set to [0.25].

countries were missing the data from the 2011, 2010, 2009 and 2008 years, and in their case, the most recent indicator was used in the study. Similarly as in the previous tests, two time periods (2011 and 2001-2010) and two groups (imports and imports adjusted by GDP) of Brazilian imports were analysed. The correlation coefficients of the tests are presented in the table 2.

**Table 2** – Pearson Correlation coefficients for imports / economic distances for Brazil

	<b>Imports 2011</b>	<b>Imports/GDP 2011</b>	<b>Total Imports 2001-2011</b>	<b>Total Imports 2001-2010/GDP 2011</b>
GDP per capita	-0,1280	-0,0021	-0,1710	0,0114
GDP deflator	-0,0345	0,2527	-0,1231	0,0565
Export	-0,1045	-0,0152	-0,1203	0,0089
Import	-0,1952	-0,0777	-0,2258	-0,0721

Source: own elaboration

Only one out of the sixteen values resulted with the significant, though weak, positive correlation. GDP deflator, which can be treated as a tool to measure a country's inflation rate, obtained a coefficient of 0.25 in the first time period group, therefore imports adjusted by the GDP. Nonetheless, the result was not repeated in the study of the second time period (imports from 2001-2010, adjusted by GDP), in contrary to the previous tests for imports / CAGE distances. As such, being the only significant result among the economic distances, the above study is not a credible test for the related hypothesis and cannot neither accept nor reject it.

Consequently, from the four formulated hypothesis, only hypothesis 2 can be addressed by the above study. Since the Ghemawat's CAGE comparator platform does not specify how each of the distances was measured, another study will be conducted in order to address the hypothesis 1 and 3. For the cultural distance, the (already mentioned in that work) Hofstede distance framework will serve as the database for the cultural indicators (HOFSTEDE, 1980). For the geographical distance, the measurement of the great circle distance between geographic centres of countries will be analysed (DEADORFF, 1998). Since the hypothesis 4 has been already analysed using other than CAGE distances values, the further analysis of the economic distance will not be continued.

### 5.1.2 Hofstede Cultural Distance and Imports Volumes

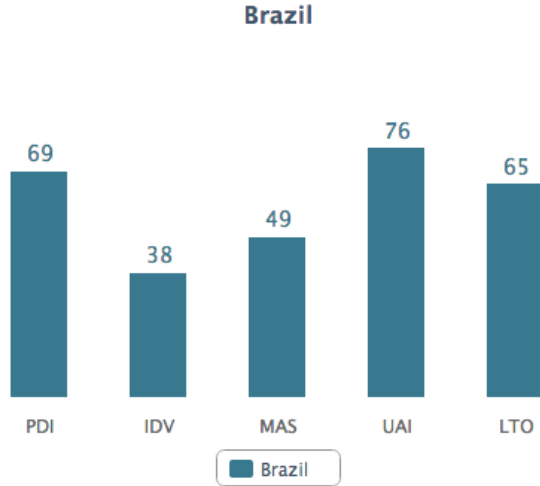
Hofstede distance framework includes the analysis of the five dimensions: power distance (PDI), individualism (IDV), masculinity / femininity (MAS), uncertainty avoidance (UAI) and long-term orientation (LTO) and is also known as the 5-D model. The scores of each country can be freely retrieved from Geert Hofstede's website. The results of the study are presented in the 1 – 120 scale, where 1 means the low and 120 high score. The scores of Brazil according to that model are presented in the figure 1.

The power distance dimension tries to explain the different (unequal) role of the individuals in the society. According to the model “power distance is the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally”. The 69 score for Brazil means, that hierarchy in the society is acceptable, and the more powerful individual has more benefits than the less powerful one. The individualism dimension has been explained as “the degree of interdependence a society maintains among its members”. The score of 38 in case of Brazil has several implications. One of them, related to the business level, is that the relationships between the partners need to be built by using trust and long-lasting relations. The third dimension, masculinity / femininity, indicates the values, which are the drivers for society's day-to-day activities. A high score (masculine) means that those values are driven by competition, achievement and success. A low score (feminine) means, that values are more associated with the caring for others and quality of life. The Brazilian score of 49 can be interpreted as the middle one, which means that “conflicts are avoided in private and work life and consensus at the end is important”. The fourth dimension, uncertainty avoidance is “the extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these”. The score of 76 in case of Brazil is coherent with the scores of other Latin American countries. Those countries show a strong need for rules and the boundaries of legal system, however they do not always obey them.

The analysis of the Hofstede model seeks to support the hypothesis 1, related to the culture. It will test the cultural proximity between Brazil and the trade partner country taking into the consideration all of the components of the Hofstede model, therefore power distance,

individualism distance, masculinity / femininity distance, uncertainty avoidance, long-term orientation.

**Figure 1** - 5-D model for Brazil



Source: Geert Hofstede's website, <http://geert-hofstede.com/>.

Hofstede model includes the analysis of 93 countries, however 10 of them did not have any import / export flows with Brazil and consequently the study has been limited to 83 countries. The other features of the study remained consistent with the previous tests, therefore two time periods (imports 2011 and total imports 2001 – 2010) and two groups of the imports (not adjusted and adjusted with the GDP of analogues country). In order to present cultural distance between Brazil and its trade partner, the values of each dimension for 83 analysed countries were compared to the “main country indicator”, which in that case were the scores of Brazil (HOFSTEDE, 1980). In order to be consistent with that methodology, the final distance between Brazil and other countries is calculated as the difference between the score of Brazil and the other country. Following the study of Yu and Cannella (2009), who applied Hofstede's cultural distance score's to measure the distance between the countries, the measure of cultural distance in this study is represented as:

$$Cultural\ distance_{jk} = \sqrt{\sum_{i=1}^5 (I_{ij} - I_{ik})^2}$$

$Cultural\ distance_{jk}$  is the cultural distance of country  $j$  from country  $k$ , where  $j$  stands for Brazil, and  $k$  for each of the Brazilian import partners included in the Hofstede dimension.  $I_{ij}$  stands for the  $i$ th cultural dimension for country  $j$  (therefore, Brazil), and  $I_{ik}$  represents

the  $i$ th cultural dimension of country  $k$  (therefore, Brazilian export partners). The correlation coefficients of the tests are presented in the table 3. Similarly as in the previous tests, the study has been conducted in two time periods and using two methods to represents Brazilian imports.

**Table 3** – Pearson Correlation coefficients for imports / Hofstede cultural distances for Brazil

	<b>Imports 2011</b>	<b>Imports/GDP 2011</b>	<b>Total Imports 2001-2010</b>	<b>Total Imports 2001-2010/GDP 2011</b>
Hofstede cultural distances	0,0851	-0,04841	-0,04783	0,00129

Source: own elaboration.

None of the results obtained in that test is significant, therefore it cannot either address hypothesis 1. Consequently, the cultural distance (as a part of the International Distance Model) will not be used as a tool to answer the research question.

### 5.1.3 Geographic Distance and Imports Volumes

The study of the great circle distance between geographic centres of Brazil and its trade partners (destinations of the imports inflow) was conducted in order to support the hypothesis 3. The great circle distance, used in that study, measures the shortest distance between two main cities (capitals) between Brazil and its trade partners. The distances have been withdrawn from the CIA World Factbook (values for the 2011). However, this variable was a part of the geographical distance of the CAGE model, and its individual strength cannot be tested by using the data from the CAGE comparator platform. This is because it measures all together the impact of the great circle distance, difference in the time zones and adjacency of the countries. The correlation coefficients of the tests are presented in the table 4.

**Table 4** – Pearson Correlation coefficients for imports / great circle distance for Brazil

	<b>Imports 2011</b>	<b>Imports/GDP 2011</b>	<b>Total Imports 2001-2010</b>	<b>Total Imports 2001-2010/GDP 2011</b>
<b>Great Circle Distance</b>	0,07922	-0,28713	-0,00149	-0,35108

Source: own elaboration.

Two coefficients obtained a significant result. Moreover, the correlation coefficient of imports from 2011 adjusted by GDP of -0.29, was strengthened in the test for the second time period 2001 – 2010, also adjusted by GDP (coefficient of -0.35). Although the correlation is weak, it can support the hypothesis 3. The negative results of the coefficients suggest, that the greater geographical distance (measured by the great circle method), the trade inflows are higher. That is to say, Brazil imports more from the countries that are further away in terms of geographical distance. Consequently, the hypothesis 3 is accepted, as the trade inflows are not positively related with the geographic proximity of Brazil and its trade partners.

#### **5.1.4 International Distance and its implications for trade**

International Distance Model resulted in addressing two (out of four) hypotheses presented in that work. Addressed hypotheses were related with the administrative and geographical distance. Although additional tests to address hypothesis 1 (cultural distance) and hypothesis 4 (economic distance) have been conducted, the results remained insignificant (see the exhibit 4 for the summary or hypothesis results in appendices).

The outcomes of both addressed hypotheses have interesting implications for the internationalization strategy of the companies, which are willing to export to Brazil. According to the results related with hypothesis 2, apparently, in terms of the imports inflows, Brazil does not favour exclusively the countries which belong to the same administrative block. That is to say, the companies from the other countries should not treat the lack of the common ground in the administrative dimensions, as the barrier to export its products to Brazil.

Implication of the hypothesis 3, related to the geographic distance, suggest that Brazil imports relatively more from the countries, which are further away in terms of the geographic (physical) distance. These findings are consistent with the outcome of the test addressing hypothesis 2. As the countries which share the same administrative block with Brazil are also close in terms of geographic distance, it is logical that the implications behind those two tests are showing the same tendency. Similarly as with the administrative part, also geographic distance should not be perceived by the companies from the distant country as the barrier for exporting to Brazil.

## 5.2 Descriptive Research

### 5.2.1 Company's overview

Company  $\alpha$ , used for the purposes of this research, is one of the oldest companies in the chemical industry in Poland, and one of the largest industrial complexes in the Lesser Poland region (south-east part of Poland). The company started its production of chemical products in the late 1920s', and in that time, it was one of the largest governmental investments in the interwar period. For more than 80 years,  $\alpha$  has established a strong position both in the domestic and international (mainly European) market. Its export strategies have been awarded by the most renowned Polish contests of business and international commerce, mainly due to a modern and innovative approach.<sup>7</sup> In the case of  $\alpha$ , export strategies have a very high importance, since 67.5% of the total production (as for the 2011) has been sold outside Poland, and its volume has been constantly increasing during the last few years. Main part of  $\alpha$  production (around 60%) consists of plastic products, with the major remainder being the nitrogen fertilizers (37%). The company exports mainly to the European Union countries, such as Germany, Belgium, Italy and Czech Republic, but also to Asia (mainly to China) and South America (mainly Brazil).

The company  $\alpha$  exports to Asia are primarily plastic materials, whereas for South America, the exporting product is nitrogen fertilizers. The export strategy inside the European Union is diversified, and hence the dominant group of the exported products cannot be distinguished.

### 5.2.2 Export strategy

In 2012, the majority of products have been exported within the European Union, mainly to Germany, representing 57% of total exports. This directly shows, that in case of  $\alpha$ , the geographic and administrative factors of International Distance Model would be assessed in favour of being the export strategy determinants. Other geographic destinations of exports are much smaller where South America represents 6% of  $\alpha$  export, Asia 4%, other non-European Union countries 2% and finally, 1% is contributed by North America and Africa.

Analysing that data from a general geographic perspective brings to the conclusion, that  $\alpha$  focuses mainly on the neighbourhood markets, or that is to say, markets which are

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<sup>7</sup> The company has received three years in a row (2009 – 2011) the title of “Polish Export Leader”, awarded by the Community of Polish Exporters.



within the same region and administrative block (the European Union). However, deeper look on the detailed data (regarding the export volumes to the particular countries of the European Union, and non-EU countries) shows that some exceptions from this tendency exist.

It should be noted, that Germany is the most common destination for trade outflows for majority of Polish companies, and that Germany itself, is the greatest trade partner for Poland. This is mainly due to the geographic proximity and the strong economic position of Germany, which is the largest market in Europe. Brazil represents 6% of overall  $\alpha$  export value, and has been classified on the third place in the top exporters' classification, meaning that Brazilian market is the most important non-European export market for  $\alpha$  (detailed distribution of  $\alpha$  exports with regard to the destination country is presented in the exhibit 5 and 6 in the appendices).

### **5.2.3 Export strategy to Brazil**

In order to understand the strategy behind exporting to Brazil, the deeper look into  $\alpha$  portfolio product is essential. As already mentioned, the production of  $\alpha$  can be divided into two main types of products: plastic products and nitrogen fertilizers. One of the intermediate products used by  $\alpha$  for the production of plastic products is caprolactam. The main chemical substances, from which it is produced, are phenol, benzene and toluene. In the process of caprolactam's production, ammonium sulphate is also being produced as a by-product of this chemical reaction (with the proportion 1 to 4, i.e. in the production process of 1 ton of caprolactam, 4 tons of ammonium sulphate is produced as the by-product).

In the 1980's, the Institute of Industrial Chemistry in Warsaw, had been intensively working on the method of decreasing that proportion, so that less of ammonium sulphate was obtained in the caprolactam's production. After several tests, the "new technology" had been discovered and resulted in the ammonium sulphate's shrink (based on the installation of hydroxylamine, the chemical reaction is reducing the ammonium sulphates volumes in the process of caprolactam's production). With "new technology",  $\alpha$  was able to produce caprolactam with the proportion 1 to 2 (1 ton of caprolactam, 2 tons of ammonium sulphate). However, even with that solution for the problem of ammonium sulphates' neutralization, it had not been fully solved. Therefore, the company's managers have been constantly looking for a solution to use (leverage on) the by-product (ammonium sulphate), so that the company was not forced to waste the resources for storing and neutralizing of the ammonium. The

storage of ammonium sulphate is generally problematic, since it is both expensive and dangerous due to the chemical composition of the substance.

Not only the engineers directly responsible for the production process were involved in resolving that problem, but also the Export Office (EO), which was formally organized in the enterprise in the mid 1980's. Since ammonium sulphate is capable of reducing the alkalinity of the soil, the EO investigated the potential regions, where the soil is highly alkaline, and where the ammonium sulphate could be used as a product. In such reasoning, Brazil was discovered as a country with highly alkaline soil, being additionally a large market that could bring potentially high profit. Since  $\alpha$  did not have any expertise in dealing with Brazilian market, and since the caprolactam was not the core product of  $\alpha$ , the EO started to look for a local partner in Brazil. Taking into account the complexity of the usage of ammonium sulphate for reducing the soil alkalinity, several tests on solution feasibility and its application in respect of that particular type of the soil were required.

The EO faced numerous obstacles when contacting the Brazilian companies from the chemical industry, however, finally one firm was found for this enterprise (in the following part, this company is referred as  $\beta$ , in order to remain anonymous). The  $\beta$  performed the tests of the possibility of using  $\alpha$  ammonium to reduce soil alkaline. The results of those tests showed a high effectiveness of the process, and as a consequence,  $\alpha$  and  $\beta$  set up a long-lasting cooperation. Finally, after several years, the profitability of the worldwide ammonium sulphate sales of  $\alpha$  surpassed the caprolactam's, which used to be the core product of that production line.

However, from the logistics point of view, exporting of this kind of product to Brazil was a complex process. Ammonium sulphate, if not stored and transported in the proper conditions, could have been easily spoiled. This was actually the case in the first freight that was sent to Brazil for the tests. With the consideration of the high costs of air transport,  $\alpha$  decided to ship the special parcels to Brazilian partner directly from the seaport of Gdynia (North of Poland) to Brazil. Further, once the process matured, several improvements of the containers transporting ammonium sulphate were made, so that the product could finally arrive to the Brazilian port unimpaired. Finally,  $\alpha$  decided to invest in the seaport of Gdynia and purchased its own warehouse, so the products awaiting for the shipment were kept in the proper conditions – as such the exporting process intensified. On the other end,  $\beta$  was solely responsible for all the actions required to prepare the 'ammonium sulphate' product to be sold

on the Brazilian market. Therefore,  $\alpha$  responsibility for the product ended once it arrived to Brazil and was picked up by  $\beta$ . This type of the cooperation continues until today, and  $\alpha$  has never changed the export strategy, neither for joint-venture nor foreign direct investment.

As the EO claims, this would require too many resources: a need for accounting for the complexity of Brazilian market and a consideration for local (Brazilian) regulations. Following this rationale, the cooperation with the local partner ( $\beta$ ) is believed to be reasonable. Moreover, as already mentioned previously, ammonium sulphate was initially only a by-product, and thus its sales and distribution were not in the central point of  $\alpha$  corporate strategy.

The cooperation between  $\alpha$  and  $\beta$  has been developing since the second half of 1980's and volumes exported to Brazil were constantly growing until 2005. In that time, the European Union (Poland joined the community one year earlier and was obliged to follow its rules and restrictions), decided to reduce the negative effect of the acid rains. As a consequence, ammonium sulphate became the desirable product also on the internal (Polish and the EU) market and the internal demand increased to the level of  $\alpha$ 's full capacity. However,  $\alpha$  decided to maintain cooperation with  $\beta$  due to the profitability of exports to Brazil. This cooperation (driven by Brazilian demand) was soaring to that extent that additional ammonium sulphate was bought by  $\alpha$  from other companies in Poland, in order to meet  $\beta$  demand.

Although  $\alpha$  started exporting ammonium sulphate to Brazil almost 30 years ago, it is still perceived by the company as one of the most successful strategic decisions. By starting the cooperation with  $\beta$ ,  $\alpha$  not only discovered the profitable possibility of selling ammonium sulphate, but even more importantly, got rid of the expensive and problematic storage problem. As the EO claims, starting the cooperation with Brazil was not an easy assignment. It took the company several months to finally find a Brazilian partner, which would agree to test the project of using ammonium sulphate to reduce the soil alkalinity.

Prior to that decision,  $\alpha$  has never cooperated with any partner from South America region, therefore it could not leverage on any known reputation, especially in the initial part of searching for the local partner. However, it should be mentioned, that the leader of the EO, and simultaneously, the initiator of selling ammonium sulphate to Brazil, spoke Spanish and Portuguese, which happened to become a valuable asset during the personal contacts between

$\alpha$  and its prospective trade partners in Brazil, and enabled developing the business tights for the long-term cooperation.

Although exporting to Brazil was profitable and reduced (if not eliminated) the problem of ammonium storage, it is essential to underline, that this type of export strategy is not the core part of  $\alpha$  business and its international strategy. The company focuses mainly on exports its finished products and not the single by-products (which need to be transformed, in order to become a finished product), as it was the case with ammonium sulphate. While doing so, the company focuses mainly on the neighbourhood markets. Such strategy is based mainly on two pillars. The first one is related to the difficulties in the transportations, due to the specific characteristics of  $\alpha$  products portfolio (chemical industry). That is the reason why  $\alpha$  prefers to export to the closely geographical countries, so the transport costs and its length are minimized. Second pillar, also explaining the current export strategy, is related to the administrative part of International Distance Model. Since the chemical industry is highly controlled by local regulations, it is simply easier to export the products within the same administrative block (in that case, the European Union), which has standardized (or quasi-standardized) regulations with regard to the chemical products. Although currently  $\alpha$  could sell the ammonium sulphate on the domestic (the European Union) market, it has decided to maintain exportation to Brazil. This happened mainly due to the two reasons. Firstly,  $\alpha$  wanted to sustain the cooperation with  $\beta$ , as in the future both companies might engage in other types of cooperation (other products), therefore maintaining the good relations was crucial. Secondly,  $\alpha$  recognizes a great potential in Latin American market and plans to export in the nearest future to other countries in that region. Consequently, the case of fruitful cooperation between  $\alpha$  and  $\beta$  may also work as the credibility test showing to prospective partners that  $\alpha$  is a solid company, that is capable to engage in exporting with the countries from that region.

#### **5.2.4 International Distance Model and the case of $\alpha$**

When applying the International Distance Model developed in that work to the case of  $\alpha$ , at least two components call for being favourable in the proximity between the export country of origin and the export countries' destination. Those are geographic and administrative distances. However, this reasoning is proper only while analysing the core part of  $\alpha$  product portfolio intended for export. Secondary products, which by definition are not

designed to bring the highest profits to the company, can make use of other layers of differences with regard to some parts of International Distance Model. In this particular case of  $\alpha$ , those were the differences natural conditions of the countries. Those differences enabled  $\alpha$  to use its own resources (products) in the profitable way.

Although Poland and Brazil are distant for more than 10,000 km, have different languages, cultures, different currency and economic situation and do not belong to the same administrative block, the cooperation between the companies from those countries, as proved in the case of  $\alpha$  and  $\beta$  case, is possible and highly beneficial mutually. Moreover, the success of ammonium sulphate in Brazil was an incentive for  $\alpha$  to look for the other possibilities of selling its secondary products to South America region.

Currently,  $\alpha$  is conducting the tests with the prospective trade partners from Argentina and Brazil with their other by-product, polyamide that could be potentially used in the automobile industry. Although the leader of the EO who was the main initiator of exporting ammonium sulphate to Brazil, left the company few years ago, the expertise on that market, as well as the business links developed during the last years with  $\beta$ , enhances the possibilities of  $\alpha$  for further successful operations in the South American markets. Know-how developed throughout almost 30 years of cooperation with  $\beta$ , facilitates the day-to-day contacts with potential partners, as well as the issues of transportation and logistics to the remote hemisphere.

## **6. RESEARCH INTERPRETATIONS, IMPLICATIONS, LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH**

Firstly, following the results of quantitative research in respect of the hypothesis 2 – regarding the administrative part of International Distance Model, the administrative blocks do now always work as a sole incentive to invest (export) to the other country. The implication from that reasoning for the companies trying to export to Brazil is straightforward. First, they should not abandon the idea of exporting to Brazil only because of the administrative (institutional-related) obstacles, particularly at the very initial stage of developing the international business strategy. This interpretation can be proved by the example of company  $\alpha$ , discussed in the qualitative part of this research. The company  $\alpha$ , based in Poland and company  $\beta$ , based in Brazil, found the way to overcome the

administrative difficulties and explore the business opportunity with mutually beneficial and long-lasting outcome.

Secondly, it crucial to notice, that choosing the export strategy of entering the foreign market (via local distributors of the product or service), decreases the potential threats related to the lack of knowledge about the local market. Forwarding such know-how responsibility to the trade partner from Brazil (in that particular case,  $\beta$ ) gives the idea of how to transform the barriers into opportunities.

Thirdly, it is worth mentioning that even in case of  $\alpha$  (who successfully approached opportunities in Brazil), its core products tend to be exported only (predominantly) within the same administrative block (the European Union), since it reduces the regulatory costs and uncertainties related with the country-specific regulations. Those regulations play an important role in specific industries (which is valid as well for chemical one – case of  $\alpha$ ) and their analyses may require more granular approach.

Fourthly, following the results of quantitative research in respect of the hypothesis 3 – suggesting that geographic distance (or that is to say, large geographic distance from Brazil and its trade partner country) does not limit the cooperation possibilities, is in fact consistent with the hypothesis 2, claiming that Brazil tends to import more from the countries which are not in the same administrative block.

Therefore while shaping international business strategies, companies from geographically distant countries, should not treat the idea of exporting on the Brazilian market as idea carrying too high barriers. The case of  $\alpha$  also proves, that Brazilian market can be attractive, even though the geographic distance is large. Moreover, in such a case the existing differences between (among) distant countries can occur to be unexplored opportunities for arbitrage or attractive demand. In the case of  $\alpha$ , discussed in that work, the Polish company by following this reasoning, could sell the products, which were of no value on the local market in that time. Consequently, the large distance apart from the difficulties related with transport and logistics, may also open another possibilities that can normally be just overlooked or missed if being geographically short-sighted only.

Another implication not to be neglected, is that once a company starts the cooperation in a distant country (in that case Poland and Brazil), the *psychic distance* (analysed in that work) diminishes. Thus, in the initial stage of exporting to a distant country, both in terms of geographic and administrative distance, it is reasonable to develop strong ties with the local

partner, which could facilitate the process of exporting and decreasing the *psychic distance*. Decreasing this distance seems to be extremely important in case of Brazil, due to its protective trade policies as well as the high level of bureaucracy, which increases the time of setting up any business in that country (OLIVEIRA, 2012). In that sense, building a strong connection with a local partner may minimize the negative impact of that problem.

The current Brazilian Trade Strategy seeks to create the situation, in which Brazil is less dependent on developed (advanced) economies, so that in the future Brazil is able to ground its external trade with the countries of MERCOSUR and other developing economies (e.g. Russia, India, China, South Africa). In that sense, the companies from the countries that are already active in the trade relations with Brazil might increase the chances to engage in exporting (OLIVEIRA, 2012).

Results of this research should be interpreted with caution. From the four hypotheses, only two have been addressed due to others not being supported by available data used in the International Distance Model with desired statistical significance. This proves that the topic of international business strategy is complex and the issue of distances and differences between various countries and markets cannot be fully explained by one model only.

First of the limitations is related with the data (sole reliance on the values of Brazilian imports). Analysing the data only from the imports perspective, might not reveal the possible tendencies that could enrich the International Distance Model.

Second weakness of this research is the lack of distinction among the industries and types of the products which are subject to exports to Brazil. Undoubtedly, the specificity of each industry is different, and some data collected in that research was either biased or inappropriate due to the general approach and interpretation.

Finally, a further research could also improve the quality of model toolkit by including more direct interaction with companies exporting to Brazil. Some more (richer) qualitative approach could be developed, rather than pure quantitative approach for model's data and its interpretation. This research should focus on finding the examples of companies from other than chemical industry, so the practical insights to the work are not limited only to one industry. This might demonstrate the problems (distances) encountered by the companies more directly, and adjust model factors to drivers that companies face while executing their exporting and internationalization strategies.

In order to enrich this research, the further study could also include the analysis of the foreign direct investments (FDI) or set up of joint-ventures (JV), in order to reveal additional factors, insights and data. International Distance Model could be also enhanced by deeper analysis of Trade and Industrial Policies of several countries. Measurements used by the World Bank (e.g. the easiness of doing business in specific countries) and World Trade Organization (e.g. protectionism, subsidies, intellectual property rights in specific countries) could be incorporated in the model and become further “distances”.

With regard to the industries, undoubtedly deeper analyse of the imports coming from specific country with distinctions for industries, would help to better understand the specificity of the Brazilian market. The case study described in that work, used the example of the company from chemical industry that is exporting its products to Brazil. However, it is worth mentioning, that the chemical industry is one of the least sensitive to the cultural habits, therefore the conclusions withdrawn from that case, are definitely not applicable to each and every industry. I believe that a future research on this model, with regard to the specific industries, could enrich the current findings and explore the potential of the model more fully.

## **7. CONCLUSION**

This work deals with the very important topic in the area of international business strategy, namely the identification of the differences (distances) between the countries. Identification of this distance in case of Brazil seems to me extremely important, since that country has been lately strengthening its international position in terms of trade and currently is one of the fastest growing emerging economies. That is the reason why it is probable that the number of companies willing to cooperate with Brazil will be constantly increasing. However, taking into account the protectionism behaviour of Brazilian policy makers, as well as the external policies which relate to trade (favouring rather developing countries that developed ones), the cooperation with Brazil, especially in the initial stage, might be problematic. That is the reason why I do believe, that the International Distance Model for Brazil addresses accurately the information need of the companies, which are willing to export to Brazil. The implications of the study are not always straight-forward, however in my opinion, emerge the critical factors that should be taken into the consideration while shaping the strategy of internationalization to Brazil.



Simultaneously, I am aware of the certain limitations of that study and the need of the further, more systematic research on that topic. I believe that the academic research may help to resolve the companies' constraints regarding the selection of appropriate strategy of entering Brazilian market. As such, it may become an accurate guideline for those, who do not have any expertise in exporting. Consequently, I hope that this work will also serve as the very basic recommendation for the companies, which are willing to export to Brazil.

## REFERENCES

ARDALAN, Kavous. Globalization and Regionalization, *Journal of International Business Research*, Vol. 9, No.1, p. 71-101, 2010.

AULAKH, Preet S.; KOTABE, Masaaki. Export Strategies and Performance of Firms From Emerging Economies; Evidence From Brazil, Chile, and Mexico. *Academy of Management Journal*, Vol. 43, No. 3, pp. 342-361, 2000.

BALDWIN, Richard E.; SEGHEZZA, Elena. Are Trade Blocks Building or Stumbling Blocks. *Journal of Economic Integration*, Vol. 25, No. 2, pp. 276-297, June 2010.

BERRY, Heather; GUILLEN, Mauro F.; ZHOU, Nan. An institutional approach to cross-national distance, *Journal of International Business Studies*, Vol. 41, No. 9, December 2010, pp. 1460-1480

CARRERE, Celine; SCHIFF, Maurice; On The Geography of Trade: Distance Is Alive and Well; *World Bank Policy Research Working Paper* 3206, 2004.

CAZURRA, Alvaro; GENC, Mehmet. Transforming disadvantages into advantages: developing-country MNEs in the least developed countries, *Journal of International Business Studies*, Vol. 39, pp. 957–979, 2008.

CLARK, Don P. Distance, Production, and Trade. *The Journal of International Trade & Economic Development*, Vol. 16, No. 3, 359 – 371, September 2007.

COSTA, Carla. Proximidade Cultural e Dinamismo Economico: Por que Investem as Empresas Portuguesas no Brasil, *Universidade de Lisboa*, 2006.

COWLEY, P. R. Market structure and business performance: An evaluation of buyer/seller power in the PIMS database, *Strategic Management Journal*, Vol. 9, No. 3, pp. 271–278, 1988.

DEARDORFF, Alan. Determinants of Bilateral Trade: Does Gravity Work in a Neoclassical World? *University of Chicago Press*, pp. 7-22, 1998.

FOXLEY, Alejandro. Regional Trade Blocks, The Way to The Future? *Carnegie Endowment For International Peace*, 2010.

GHEMAWAT, Pankaj. Redefining Global Strategy: Crossing Borders in a World Where Differences Still Matter, *Harvard Business School Press*, Boston 2007.

GHEMAWAT, Pankaj. Semiglobalization and International Business Strategy. *Journal of International Business Studies*, Vol. 34, No. 2, pp. 138-152, March 2003.

GAUR, Ajai; KUMAR, Vikas; SARATHY, Ravi. Liability of Foreignness and Internationalization of Emerging Market Firms, *Advances in International Management*, VO. 24, pp. 211-233, 2011.

HOEFSTEDE, Geert; HOPPE, Michael H. Geert Hofstede's "Culture's Consequences: International Differences in Work-Related Values". *The Academy of Management Executive*, Vol. 18, No. 1, pp. 73-74, February, 2004.

HULTMAN, Magnus; ROBSON, Matthew; KATSIKEAS, Constantine. Export Product Strategy Fit and Performance, *Journal of International Marketing*, Vol. 17, No. 4, 2009, pp. 1–23.

JAVIDAN, Mansour; HOUSE, Robert J.; DORFMAN, Peter W.; HANGES, Paul J.;

LUQUE, Mary Sully. Conceptualizing and measuring cultures and their consequences: a comparative review of GLOBE's and Hofstede's approaches, *Journal of International Business Studies*, Vol. 37, pp. 897–914, 2006.

JOHANSON, Jan; VAHLNE, Jan-Erik. The Uppsala internationalization process model revised. *Journal of International Business Studies*, Vol. 40, No. 9, pp. 1411-1431, 2009.

KAY, John, Geography is still important, *Financial Times*, 10 January 2001, p. 14. Available on-line at <http://www.johnkay.com>

KHAN, Omar J. The Regionalization vs. Globalization Debate on Internationalization, *Global Partnership Management Journal*, Vol. 1, No. 1-2, 2010.

KIRKMAN, Bradley L.; LOWE, Kevin B.; GIBSON, Cristina B. A Quarter Century of "Culture's Consequences": A Review of Empirical Research Incorporating Hofstede's Cultural Values Framework, *Journal of International Business Studies*, Vol. 37, No. 3, pp. 285-320, May 2006.

KNIGHT, Gary; CAVUSGIL, Tamar. Innovation, organizational capabilities, and the born-global firm, *Journal of International Business Studies*, Vol. 35, No. 2, pp. 124-141, 2004.

LEANA, Carrie R.; BARRY, Bruce. Stability and Change as Simultaneous Experiences in Organizational Life. *Academy of Management Review*, Vol. 25, No. 4., pp. 753-759, 2000.

LEUNG, Kwok; BHAGAT, Rabis S.; BUCHAN, Nancy R.; EREZ, Miriam; GIBSON, Cristina B. Culture and International Business: Recent Advances and Their Implications for Future Research. *Journal of International Business Studies*, Vol. 36, No. 4, pp. 357-378, February 2005.

LEVITT, Theodore. The Globalization of Markets, *Harvard Business Review*, 1983.

MEHANNA, Rock-Anoine. Globalization Versus Regionalization, *Journal of Transnational Management*, Vol. 13, No. 4, pp. 287-317, 2008.

MYERS, Matthew; DROGE, Cornelia; CHEUNG, Mee. The fit of home to foreign market environment, *Journal of World Business*, Vol. 42, No. 2, 2007, p. 170-183.

OLIVEIRA, Ivan; *Politica Comercial e Politica Externa No Brasil*, Instituto de Pesquisa Economica Aplicada, 2012.

PENG, Mike W. *Global Strategy*, South-Western Cengage Learning, Mason, 2009.

PENG, Mike W.; PLEGGENKUHLE-MILES, Erin G. Current Debates in Global Strategy. *International Journal of Management Reviews*, Vol. 11, No. 1, pp. 51–68. 2009.

ROTH, Martin S. The Effects of Culture and Socioeconomics on the Performance of Global Brand Image Strategies. *Journal of Marketing Research*, Vol. 32, 163-175, May 1995.

RUGMAN, Alan; HODGETTS, Richard. The end of global strategy, *European Management Journal*, Vol. 19, No. 4, pp. 332-368, 2001.

RUGMAN, Alan; VERBEKE, Alain. A perspective on regional and global strategies of multinational enterprises, *Journal of International Business Studies*, Vol. 35, No. 1, pp. 3-18, 2004.

TAKEUCHI, Hirotaka. "The Globalization of Markets" Revised, Chapter 3, *The Global Market: Developing a Strategy to Manage Across Borders*, Harvard Business School, 2004.

TIHANYI, Laszlo; GRIFFITH, David A.; RUSSELL, Craig J. The Effect of Cultural Distance on Entry Mode Choice, International Diversification, and MNE Performance: A Meta-Analysis. *Journal of International Business Studies*, Vol. 36, No. 3, pp. 270-283, May 2005.

TSANG, Eric W.; YIP, Paul S. Economic distance and the survival of foreign direct investments, *Academy of Management Journal*, Vol. 50, No. 5, 2007, pp. 1156–1168.

XU, Dean; SHENKAR, Oded. Institutional Distance and The Multinational Enterprise, *Academy of Management Review*, Vol. 27, No. 4, pp. 606-618, 2002.

YU, Tieying; CANNELLA Jr., ALBERT A. Rivalry Deterrence in International Markets, *Academy of Management Journal*, Vol. 52, No. 1, pp. 127-147, 2009.

ZHOU, Lianxi; WU, Wei-Ping; XUEMING, Luo. Internationalization and the Performance of Born-Global SMEs, *Journal of International Business Studies*, Vol. 38, No. 4, pp. 673-690, 2007.

## APPENDICES

**Exhibit 1** – The CAGE framework at the country level

	<b>Cultural distance</b>	<b>Administrative distance</b>	<b>Geographic distance</b>	<b>Economic distance</b>
<b>Country-pairs (bilateral)</b>	<ul style="list-style-type: none"> <li>- different languages</li> <li>- different ethnicities; lack of connective ethnic or social networks</li> <li>- different religions</li> <li>- lack of trust</li> <li>- different values, norms, and dispositions</li> </ul>	<ul style="list-style-type: none"> <li>- lack of colonial ties</li> <li>- lack of shared regional trading bloc</li> <li>- lack of common currency</li> <li>- political hostility</li> </ul>	<ul style="list-style-type: none"> <li>- physical distance</li> <li>- lack of land border</li> <li>- differences in time zones</li> <li>- differences in climates and disease environment</li> </ul>	<ul style="list-style-type: none"> <li>- rich-poor differences</li> <li>- other differences in cost or quality of: natural resources, financial resources, human resources, infrastructure, information or knowledge</li> </ul>
<b>Countries (unilateral or multilateral)</b>	<ul style="list-style-type: none"> <li>- insularity</li> <li>- traditionalism</li> </ul>	<ul style="list-style-type: none"> <li>- nonmarket or closed economy</li> <li>- extent of home bias</li> <li>- lack of membership in international organizations</li> <li>- weak institutions; corruption</li> </ul>	<ul style="list-style-type: none"> <li>- landlocked geography</li> <li>- lack of internal navigability</li> <li>- geographic size</li> <li>- geographic remoteness</li> <li>- weak transportation or communication links</li> </ul>	<ul style="list-style-type: none"> <li>- economic size</li> <li>- lower per-capita income</li> </ul>

Source: GHEMAWAT, Pankaj. Redefining Global Strategy: Crossing Borders in a World Where Differences Still Matter, p. 41, 2007.

**Exhibit 2** – Cross-country analyses of CAGE for Portugal and Poland, from the Brazilian perspective

	<b>Cultural attractions</b>	<b>Administrative attractions</b>	<b>Geographic attractions</b>	<b>Economic attractions</b>
<b>Portugal</b>	<ul style="list-style-type: none"> <li>- the same (Portuguese) language</li> <li>- existence of periodical diasporas, since the Portuguese colonization;</li> </ul>	<ul style="list-style-type: none"> <li>- Portugal is Brazilian colonizer</li> </ul>	<ul style="list-style-type: none"> <li>- direct connection through marine ports</li> <li>- many daily direct flights from Portugal to Brazil</li> </ul>	<ul style="list-style-type: none"> <li>- platform to enter the EU market</li> <li>- bilateral agreements enable to approximate to the EU</li> </ul>
<b>Poland</b>	<ul style="list-style-type: none"> <li>- large diaspora (the second Polish diaspora worldwide in absolute number of descendants)</li> </ul>		<ul style="list-style-type: none"> <li>- lack of direct flights from Poland to Brazil</li> </ul>	<ul style="list-style-type: none"> <li>- larger domestic market</li> <li>- one of the highest economic growth among the EU countries</li> <li>- both countries are developing (emerging) economies</li> </ul>

Source: own elaboration based on GHEMAWAT (2007), p. 46.

**Exhibit 3** – CAGE Distance Analysis for Brazil (Top 20 countries) – the smaller value of CAGE distance, the greater the proximity between the countries according to that model.

	Country	CAGE DISTANCE		Country	CAGE DISTANCE		Country	CAGE DISTANCE
1	Paraguay	347	8	Venezuela	1418	15	Dominica	4596
2	Argentina	472	9	Guyana	1571	16	Panama	4614
3	Uruguay	495	10	Portugal	2050	17	Angola	4712
4	Bolivia	684	11	Chile	2820	18	Barbados	4718
5	Peru	923	12	Ecuador	2820	19	Dominican Rep.	4799
6	Colombia	1197	13	Trinidad and Tob.	3646	20	Liberia	4809
7	Suriname	1363	14	Grenada	3782			

Source: CAGE Comparator, [www.ghemawat.com](http://www.ghemawat.com).

**Exhibit 4** – Summary of the outcomes of International Distance Model

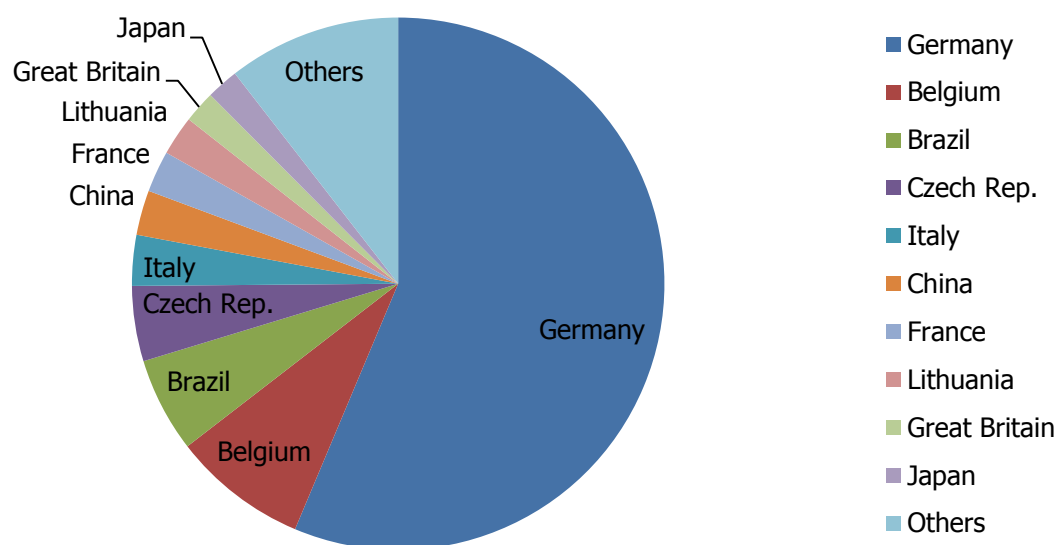
Hypothesis	Result	Implication of the result
<b>H1: Cultural Distance</b>	not supported	-
<b>H2: Administrative distance</b>	rejected	Brazil imports more from the countries, which are less similar in terms of the administrative distances.
<b>H3: Geographical distance</b>	accepted	Brazil imports more from the countries that are further away in terms of geographical distance
<b>H4: Economic distance</b>	not supported	-

Source: own elaboration.

**Exhibit 5** – Top 10  $\alpha$  export destinations and % value of overall export in 2012

Country	% of overall export value
Germany	56.33 %
Belgium	8.21 %
Brazil	5.76 %
Czech Rep.	4.57 %
Italy	3.08 %
China	2.72 %
France	2.52 %
Lithuania	2.40 %
Great Britain	1.95 %
Japan	1.95 %

Source: own elaboration based on data provided by the company.

**Exhibit 6** – Destination of  $\alpha$  exports in 2012 by countries

Source: own elaboration based on data provided by the company.



**Exhibit 7: Main questions asked in the qualitative part to the company  $\alpha$**

**1. Company's history and background:**

- introduction and brief history – in which industry does it operate?
- short description of the industry in which it operates;
- products range;
- when did it start exporting?
- does it import any parts from abroad partners – if yes, from which countries?

**2. Company's exporting strategy:**

- to which countries does it export?
- the history and evolution of exporting (in which year did it start exporting to particular countries?);
- product differentiation among the export destinations?
- does it export entire variety of products or only few products?
- what was the main incentive of exporting strategy – the choice of the countries can be associated with cultural, administrative, geographical, economic proximity?
- does it adjust the products for exporting (if yes, to which destinations)?
- what are the main difficulties does it face in exporting process (logistics, transportation, contact with the foreign partner...)?
- does it have a special department (person) dedicated to exporting issues (if yes, what are the background of these people)?

**3. Export – Brazil**

- when did it start exporting to Brazil?
- what was the main incentive for exporting to Brazil?
- how did it contact the Brazilian partner?
- does it cooperate only with one Brazilian partner?
- did they ever travel to Brazil (if not, how do they communicate with Brazilian partner – which mean of communication/language issues)?
- did it adjust the products for Brazilian market?
- what products does it export to Brazil?
- do they differ from the products that it produces for the domestic market and other exporting destinations?
- what were the main obstacles while commencing the cooperation with Brazilian partner (can those problems be associated with cultural, administrative, geographical, economic distances?)
- the value of exports to Brazil (if the company does not agree to give accurate value, at least the % of growth/decline of export); revenues from exporting Brazil – vs. other exporting destinations of that company;

**4. Future of exporting**

- does it plan to increase the number of exporting destinations?
- if yes, what countries (are they similar in any aspect of the CAGE framework to Brazil?).